

H.264 NETWORK Embedded DVR

# User Manual

960H DVR

**Thank you for purchase our product. Please read this user manual carefully to ensure that you can use the device correctly and safely.**

### **Attentions:**

- ◆ The DVR should be installed in a well-ventilated place, keep suitable space from ground, benefit for machine cooling, Be sure not to block its air vent., keep away from heat sources and high temperature environment.
- ◆ Please keep the level installation of this product. should be avoid install at violently shaking place (such as the back of car, motor above, high and rough luggage-rack).
- ◆ For avoid short circuit cause fire or other damage, when wash the car please prevent DVR(include camera and other parts) touch water and wet, the machine don't have waterproof.
- ◆ The equipment consists of Precision Parts, please do not try to disassemble or adjust any parts, if need maintenance, please contact the distributor or customer service.
- ◆ Please select the hard disk which commended by the manufacturers, suit the DVR work requirement, to meet a long time large amount of data read and write requests, please purchase from the formal channels to ensure the hard disk quality.
- ◆ This product can't bear heavy weight, please do not place heavy object or multi-layer laminated on the product.

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#### **Disclaimer:**

The Company is do the best to make the content correct and complete during the preparation of this manual, if has any errors or omissions without any liability, the company reserves the right to change any hardware and software mentioned in this manual at any time, and without explain beforehand. Thank you for choosing our products, please read this manual carefully before use. Due to not according to the specified operating losses, company will not assume any financial liability and legal responsibility.

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# 1. Product Introduction

## 1.1 Summary

This device is a digital monitoring and recording product specially designed for the security field. It adopts standalone processor and standalone Linux operating system.

The device combines with the latest technologies in the IT field, such as video and audio compression/decompression, large capacity HDD record, TCP/IP network etc.. The code is embedded in the FLASH chip, which makes the system running more steadily. This device has both features of digital video and audio recording(DVR) and digital video and audio server(DVS). It can not only work locally and independently but also compose of a powerful security monitoring net with networking. With the use of professional network video surveillance platform (network) software, it can fully reflect its strong networking and remote monitoring capability.

It can be used for the security protection in the fields of banking, telecommunications, electronic power, justice, traffic, residential, factory, warehouse, water conservancy facilities and other areas and departments.

## 1.2 Main Functions

### ►Real-time Monitoring

It is with analog video output port, VGA port and HDMI port. It can realize the monitoring function through the monitor or display. It supports simultaneous TV , VGA and HDMI output.

### ►Storage Function

It adopts special format to save data which cannot be tampered with and will be secured

### ►Compression Method

It supports multi-channel audio and video signal. Each channel of audio and video signal is compressed in real time by independent hardware. The sound and image keep stabilized synchronization.

### ►Backup Function

It backups through USB port(such as common U disk, mobile hard disk, SATA Combo etc.) The client computer can download and backup the files on the hard disk via the internet

### ►Video Playback Function

Each channel can realize independent and real-time recording, while retrieval, reverse play, network monitoring, video search and download etc. can realize simultaneously. Multiple playback modes: slow forward, fast forward, reverse play and frame-by-frame play. When playing back the video, the exact time of the event can be displayed.

### ►Network Operation Function

Through the internet, you can realize remote and real-time monitoring, remote video search and playback, and remote PTZ control.

### ►Communication Port

With RS485 port and PTZ control.

With standard Ethernet port, realizing network remote control function

### ►PTZ Control

Support the PTZ decoder which communicates through RS485.

Can expand multiple decoding protocols, facilitating the realization of PTZ and dome camera control.

### ►Intelligent Operation

Mouse operation function. For the same settings on the menu, you can copy and paste quickly. Check equipment and accessories..

When you receive the product, please check the accessories are complete or not.

DVR accessories generally include: mouse, power lines and data lines.

### 1.3 Front panel buttons description

**Statement:** the front panel interface, button layout and type, real product shall prevail.  
The front panel buttons Description:



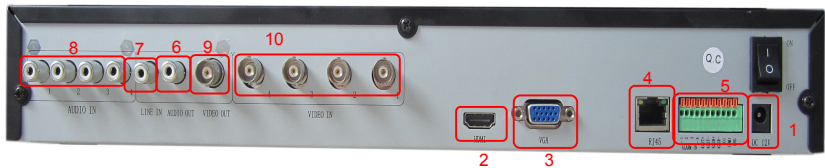
#### Buttons on Front Panel

- 1) **IR Sensor (Red Color)** : IR receiver for the remote control.
- 2) **LED Indicators**: Shows status of alarm, rec, power, link, HDD.
- 3) **Playback**: During playback, press the following:
  - : Increase reverse playback speed 1X, 2X, 4X, 8X
  - : Press to start playback
  - : Press to freeze playback to one frame, then press again to advance frame-by-frame
  - : Press to slow playback speed by 1/2, 1/4, 1/8
  - : Press to increase forward playback speed 1X, 2X, 4X, 8X
- 4) **MENU/ OK**: Press to open/close the main menu or confirm.
- 5) **Navigation**: Press the Navigation buttons to perform the following:
  - : Press to move cursor up; in PTZ mode, press to pan camera up
  - : Press to move cursor down; in PTZ mode, press to pan camera down
  - : Press to move cursor left; in PTZ mode, press to pan camera left
  - : Press to move cursor right; in PTZ mode, press to pan camera right
- 6) **USB**: Connect a USB flash drive to the top port for data backup and firmware upgrades connect a USB mouse to the bottom port.



# 1.4 Rear panel diagram

Statement: pic:



the rear panel interface, button layout and type, real product shall prevail. , below rear panel picture may be different with the actual panel.

**Connectors on Rear Panel:**

| Item | Physical connector | Connector description                           |
|------|--------------------|---|
| 1    | Power input        | DC 12V/3A                                       |
| 2    | HDMI               | For connecting HDMI monitor                     |
| 3    | VGA                | For connecting VGA monitor                      |
| 4    | Network            | For connecting Ethernet                         |
| 5    | Alarm Input        | 4 I/O alarm input                               |
|      | Alarm Output       | 1 I/O output for alarm                          |
|      | RS 485             | RS 485 for connecting PTZ                       |
| 6    | Audio output       | For connection audio output                     |
| 7    | LINE IN            | For connecting Intercom equipment               |
| 8    | Audio Input        | For connecting audio signal input               |
| 9    | Video output       | video output for connecting TV or monitor (BNC) |
| 10   | Video input        | For connecting digital video signal input (BNC) |

## 1.5 Remote control

In device operation, the enter key on remote control has the same function as left click of the mouse.


The remote control is the secondary input device  
For navigating the system's interface.

To use the remote control:

1. **STANDBY**: When DVR on, constantly press the RED button on the top for 3 seconds, the DVR will be in standby status. Under standby mode, press one time for immediate start.

2. **LOGIN/LOCK**: If "Security" has been enabled in the Setup menu, press to open the user password login screen.

3. **Number/Channel buttons**: While in menus, press buttons 0~9 to enter values; during live viewing, press to view channels in full-screen.





4. : Press to switch between quad and split-screen displays.

5. **MENU**: Opens the main menu.

6. **PTZ**: Press to open the PTZ control window.

7. **EXIT**: Close menu windows.

8. **Navigation/OK**:

- : Move cursor in menus up;
- : Move cursor in menus right;
- : Move cursor in menus left;
- : Move cursor in menus down;
- **OK**: In menus, press to confirm selections; during playback and preview, press to view system information






9. **+/-**: In menus, press to adjust values.

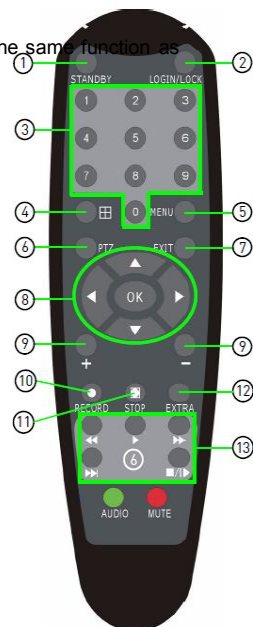
10. **RECORD**: Press to start manual recording.

11. **STOP**: Press to stop manual recording.

12. **EXTRA**: For the future use.

13. **Playback controls**:

- : Increase reverse playback speed 2X, 4X, 8X
- : Press to start playback
- : Press to increase forward playback speed 2X, 4X, 8X
- : Press to slow playback speed by 1/2, 1/4, 1/8
- : Press to freeze playback to one frame, then press again to advance frame-by-frame



**TIP:** When using the remote control to enter password and camera titles, select the field using the navigation buttons, press ENTER, and then press the number buttons.

### Check whether there is fluorescent light being used in the nearby

For the convenience of readers read and quick queries, the following sections with a example of 4-channel digital hard disk recorders to introduce the details, and pictures are base on this model, other model's operation interface are the same except channel and frame rate, Corresponding parameter to the same settings, individual parameters can be directly and so on.

## 2. Basic function operation

### 2.1 On/off Switching navigation

#### 2.1.1 Start

Before start, Please ensure all parts connected well !

Power on

Equipment start, POWER indicator light is red.


#### 2.1.2 Power off

User can power off the device by using remote controller、keyboard and mouse.

#### 2.1.3 By remote controller:

Press Power button, the Shut down window will appear, click OK, the unit will power off after a while.

#### 2.1.4 Disconnect the power by keyboard and mouse:

Step1: enter into Menu, then select "System Shut Down" icon, the Shut down window will appear 

Step2: click OK, the unit will power off after a while.

Step3: disconnect the power

### 2.2 Login

Equipment start , 【POWER】 indicator light bright. initial password is blank. After equipment start press 【MENU】 key on panel or press right key on mouse, trun to login interface as below:








Pic2-1 User login

After Input matching user name and password,you can enter system to setup and operation.

Live preview interface:





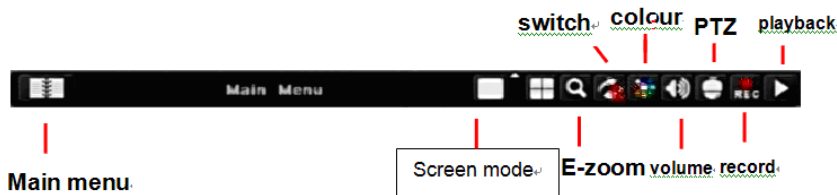
| Icon             |  |  |  |  |  |
|------------------|---|---|---|---|---|
| Sign description | Recording   | Manual record   | Motion detection state  | Alarm state   | Timing recording state  |

#### ► Live playback


Click Playbutton to playback the record  enter fast record playback: as below picture: User can do concrete operation by click the buttons on screen.

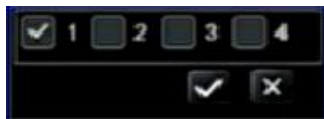
## 2.3 Main menu setup guide

**Menu bar:** Click right mouse or press ESC button on the front panel, the control bar will display on the bottom of the screen, refer to pic2-2





Pic2-2 Menu bar

Click the  icon near Screen mode , appear channel choose frame as below



Pic2-3 Channel choose

user could choose 1 channels from 1-4 to show live video.click  to save.

Click function menu , will show dialogue frame as Pic 2-4;



Pic 2-4 Mian function

Click"Config", display syswindows as pic2-5:



Pic 2-5 Configuration management"

Press MENU button on the front panel or the same button on remote control, also could display the same window.

## 2.4 Configuration management

Configuration Management contains nine sub-menu: basic configuration, on-site configuration, video configuration, recording plan, alarm configuration, network configuration, user management, PTZ configuration and advanced configuration.

### 2.4.1 Basic configuration

Click “Basic configuration”, show window as pic2-6, The basic configuration contains two sub-menu: system date and time

#### 1) system



Pic 2-6 System

In this interface user can setup the device name, device ID, video format, Video Output and language, Screensaver and so on. The definitions for every parameters display as below:

**Device name:** It may display on the client end or CMS that help user to recognize the device remotely.

**Device number:** Corresponding with the remote control number

**Video format:** two modes: PAL and NTSC. User can select the video format according to that of camera.

**Password check:** Enable this option. user needs to input user name and password can do corresponding operations with the relevant right in system configuration.

**Show system time:** choose display time in live or not

**Video output:** the resolution of live display interface, range from: VGA800\*600, VGA1024\*768, VGA1280\*1024, HDMI 1080P

**Language:** setup the menu language: English, Italian, Greek, Russian, Polish, Portuguese, Turkish, Hungarian, Spanish, French, German, Japanese, Slovakia, Vietnam, Simple Chinese, Traditional Chinese.

Click the "Default" button, the system restore the default things ;

Click the "Apply" button will save the above settings; click the "Exit" button to exit the current interface, Tip to change the menu language and video output, the device will restart.

## 2 ) Time & date



Pic 2-7 Time & date

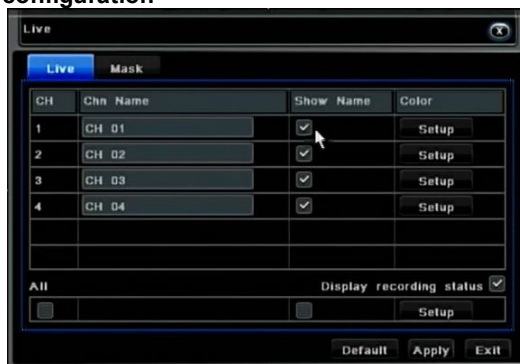
Set the date format, time format time zone at the date and time "interface;  
**Note:** Click the "Default" button, the system restore the default settings;  
Click the "Apply" button will save the above settings;  
Click the "Exit" button to exit the current interface.

### 2.4.2 Live configuration

Click "**Live configuration**", enter window as pic2-8

Live configuration includes two submenus : live and mask

#### 2.4.2.1 Live configuration



Pic 2-8 Live configuration

**Note:** Click Camera Name to see a soft keyboard. User can choose different character format to input.

Tick off camera name and click “Setup” button to display a window as below:



Pic 2-9 Live-color adjustment

In this interface, user can adjust brightness, hue, saturation and contrast in live; click “Default” button to resort default setting, click “OK” button to save the setting. user can setup all channels with same parameters, please tick off “all” and then do relevant setup.

## 2.4.2.2 Mask

Private mask. User can setup private mask area on the live image picture,



Pic 2-10Mask

**Setup mask area:** click Setting button, enter into live image to press left mouse and drag mouse to set mask area, refer to below picture. Click Apply button to save the setting.:

**Delete mask area:** select a certain mask area, click left mouse to delete that mask area, click Apply button to save the setting.



Live image mask area

2.4.3 Record configuration

Click “Record configuration”, enter window as pic2-11:  
Record configuration includes four sub menus: start, record bit rate, Character overlay. recycle record.

2.4.3.1 Start



Pic 2-11 Start

Tick off record channel, channel audio.  
User can setup all channels with same parameters, tick off “All”, then to do relevant setup.  
Click “Default” button to resort default setting; click “Apply” button to save the setting; click “Exit” button to exit current interface.  
Video parameters instruction

| Parameter | Meaning                            |
|-----------|------------------------------------|
| Enable    | Every channel video record switch  |
| audio     | Start use the channel record audio |

### 2.4.3.2 Record bit rate



Pic 2-12 Record bit rate

Setup rate, resolution, quality, encode and max bit stream

User can setup all channels with same parameters, tick off "All", then to do relevant setup.

Click "Default" button to resort default setting; click "Apply" button to save the setting; click "Exit" button to exit current interface.

### 2.4.3.3 Record stream introduce

| Parameter   | Meaning  |
|-------------|--|
| Fps         | Range from 1-30 (NTSC) 1-25(PAL)   |
| Resolution  | Support 1080P、720P、D1、CIF  |
| Quality     | The higher the value is, the clearer the Recorded image is. Six options: lowest, lower, low, medium, higher and highest. |
| Coding      | Support CBR and VBR  |
| Max bitrate | Select range: 16kb、32kb、64kb、128kb、256kb、512kb、640kb、768kb、1024kb、1536kb、2048kb、3072kb                                   |

**Stamp:** User can overlap the channel name and time stamp on video.



Pic 2-13 Character overlay

Tick off camera name, time stamp; click Setting button, and then user can use cursor to drag the camera name and time stamp in random positions. Please refer to below Figures

User can also setup all channels with same parameters.

Click "Default" button to resort default setting; click "Apply" button to save the setting; click "Exit" button to exit current interface

#### 2.4.3.4 Recycle record

Tick off recycle record to enable the recycle record function. It will cover the earlier recorded files and keep recoding when HDD is full; if disenabled, it will stop recording when HDD is full. Note: general the image quality, frame rate and resolution parameters setting higher, the more take up disk space.

Click "Default" button to resort default setting; click "Apply" button to save the setting; click "Exit" button to exit current interface.

#### 2.4.4 Schedule configuration

Schedule configuration includes two sub menus: schedule、motion and sensor.

##### 2.4.4.1 Schedule

The volume means the seven days of a week from Monday to Sunday; the row means 24 hours of a day. Click the grid to do relevant setup. Blue means checked area, gray means unchecked area.



Pic 2-14 Schedule

**Copy:** User can apply the schedule setting of certain channel to other or all channels. Just only select channel and click "Copy" button.



Click “Default” button to resort default setting; click “Apply” button to save the setting; click “Exit” button to exit current interface.

#### 2.4.4.2 Motion



Pic 2-15 Motion

The setup steps of motion are familiar with schedule

**Note:** the default schedule of motion detection is full-selected, that is, the color of schedule setting interface is blue.

#### 2.4.4.3 Sensor



Pic 2-16 Sensor

The setup steps of alarm are familiar with schedule

**Note:** the default schedule of sensor is full-selected, that is the color of schedule setting interface is blue.

#### 2.4.5 Alarm configuration

Alarm configuration includes five sub menus: sensor, motion, video loss and alarm out.



### 2.4.5.1 Sensor

Sensor includes two sub menus: basic, alarm

#### 1> Basic



Pic 2-17 Sensor - Basic

Enable sensor alarm and set the alarm type according to triggered alarm type. Two option: low level and high level

User can setup all channels with same parameters, please tick off "All", and then to do relevant setup.

Click "Default" button to resort default setting; click "apply" button to save the setting; click "Exit" button to exit current interface.

#### 2> Alarm handling



Pic 2-18 alarm handling -alarm configuration-sensor

Select hold time and click setting button. Then a dialog box will pop-up as below:



Pic 2-19 alarm handling -alarm configuration

Alarm configuration: in the alarm configuration interface can check the alarm way: audible alarm, trigger alarm and e-mail alarm

Trigger recording: check the trigger channel at "trigger video" interface, . Click "OK" to save the above settings, click "Exit" to exit the current interface channel.

Alarm linkage: set the alarm type and linkage type at linkage alarm interface, such as preset positions, cruise line or track (Note: these three is already applicable in before PTZ configuration, click "OK" to save above settings when the corresponding channel alarm input, PTZ start a preset point,cruise lines and trajectories. Click "Exit" to exit the current interface.



Pic 2-20 Alarm handling - alarm linkage

User can setup all channels with same parameters, please tick off "All", and then to do relevant setup. .

Click "Default" button to resort default setting; click "Apply" button to save the setting; click "Exit" button to exit current interface.

## 2.4.5.2 Motion

Motion includes one sub menus: motion

### 1> Motion



Pic 2-21 Motion

Click start motion alarm and set alarm hold time, It refers to after close motion alarm it delay to the preset setting time. Click alarm "Settings" button, show below window :



Pic 2-22 Alarm handling

Alarm configuration, trigger video alarm handling, linkage alarm handling and sensor alarm handling trigger settings is same.

Click on "Area Settings" button at Motion detection interface, trun to the following window;



Pic 2-23 Motion detection - Regional Settings

At area Setting interface, users can drag the slider to adjust the sensitivity value (1-5), the default value is 4, 1-5 sensitivity progressive increase. Sensitivity influenced by the color of time (day or night), the users should adjust according to actual situation. click icon, set All locales for the detection region; click icon, will clear setting detection region; click icon, save setting; click button, exit from current interface.

User can setup all channels with same parameters, please tick off "All", and then to do relevant setup.

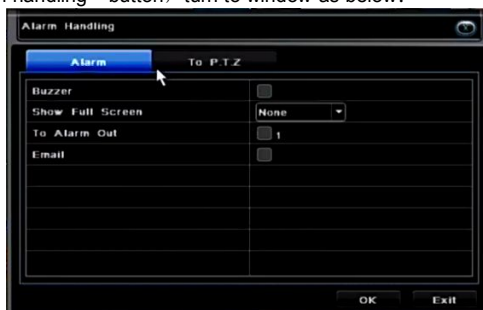
Click "Default" button to resort default setting; Click "Apply" button to save the setting; click "Exit" button to exit current interface.

### 2.4.5.3 Video loss



Pic 2-24 Video loss

Click “Alarm handling” button, turn to window as below:



Pic 2-25 Video loss - alarm handling

The setup steps of video loss trigger are familiar with alarm handling.

User can also setup all channels with same parameters, . click “Apply” button to save the setting; click “Exit” button to exit current interface.

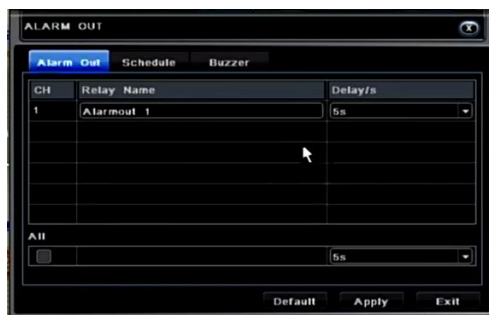
Click “Default” button to resort default setting;

Disconnected from the network: when the network connection is disconnected, the system will automatically sent E-mail to the user specified mailbox about the network disconnected.

#### 2.4.5.4 Alarm out

Alarm out includes two sub menus: alarm out, and buzzer.

##### 1> Alarm out



Pic 2-26 Alarm out

In this interface, set relay alarm out name, select hold time which means the interval time between the two adjacent alarms

User can setup all channels with same parameters. Tick off “All” to do relevant setup. click “ Default” button to resort default setting; click “Apply” button to save the setting; click “Exit” button to exit current interface.

##### 2> Buzzer

At buzzer interface, tick off Buzzer, set buzzer alarm hold time

#### 2.4.6 Network configuration

Network configuration includes four submenus: network, sub stream, Email and other settings.

### 2.4.6.1 Network



Pic 2-27 Network configuration

**HTTP port:** the default value is 80. If the value changed, user needs to add the port number when typing IP address in IE address blank. IE set HTTP port to 82, IP address: http://192.168.0.25, user needs to input that address: http://192.168.0.25:82 into IE browser.

**Server port:** data and image communication port NO. After selecting the "Obtain an IP address automatically", the device will distribute IP address, subnet mask, and gateway IP and DNS server.

Enable PPPoE to directly connect the DVR to internet via ADSL and then input the user name and password; click TEST button to test the effectiveness of the relevant information.

Click "Default" button to resort default setting; click "Apply" button to save the setting; Click "Exit" button to exit current interface.

### 2.4.6.2 Network Sub stream



Pic 2-28 Network Sub stream

select fps, resolution, quality., user can also setup all channels with same parameters. click "Apply" button to save the setting; click "Exit" button to exit current interface. network configuration-network.

| Parameter         | Meaning   |
|-------------------|---|
| <b>FPS</b>        | Range from: 1-30 (NTSC) 1-25 (PAL)  |
| <b>Resolution</b> | Support D1、CIF  |
| <b>Quality</b>    | The higher the value is, the clearer the record image. Six options: lowest, lower, low, medium, higher and highest. |

### 2.4.6.3 Email



Pic 2-29 Email

**SMTP Server/Port:** the name and port number of SMTP server.

**Send address/password:** sender's email address/password.

**Receive address:** receiver's email address. Here user can add at least three mail addresses.

Click Test button to test the validity of the mailbox.

Click "Default" button to resort default setting; click "Apply" button to save the setting; click "Exit" button to exit current interface.

### 2.4.6.4 Other settings



Pic 2-30 Other settings

Enable DDNS server: user needs to input user name, password and host domain name of the registered website, click TEST to test the effectiveness of the relevant information. click "Default" button to resort default setting; click "Apply" button to save the setting; click "Exit" button to exit current interface.

**Note:** the user select a domain name is bound by the Domain Name Service for DVR, you must first landing the website of the ISP registered user name and password, and then apply for a domain name for the server online. After the application is successful, the user could enter the domain name to access the server in IE side.

## 2.4.7 User management

Enter User management , as below pic:



Pic 2-31 User management

Clicking Add button, a dialog box will pop-up as below:



Pic 2-32 General

① General: Input user name, password; select user type, input the MAC address of the PC; click OK button, this user will be added into the user list box; click Exit button to exit the current interface.

② Authority:



Pic 2-33 Authority:

In the authority interface, assign the definite operation right for that user.

In the user management interface, click Setup button to modify user name, user type and binding PC MAC address.

Select the user that user wants to delete in the user list box and then click "Delete" button to delete this user. click Change password button to modify the password and then click "Exit" button to exit the current interface.



## 2.4.8 P.T.Z configuration

P.T.Z configuration includes two submenus: serial port and advance

### 2.4.8.1 serial port



Pic 2-34 Serial port

Click “Start”, base on P.T.Z support Protocol to set Address, Baud rate, and Protocol. User can setup all channels with same serial port parameters, please tick off “All”, and then to do relevant setup. click “Default” button to resort default setting; click “Apply” button to save the setting; click “Exit” button to exit current interface.

#### Definitions and descriptions of serial port:

| Parameter | Meaning   |
|-----------|---|
| Address   | The address of the PTZ device   |
| Baud rate | Baud rate of the PTZ device. Range form: 110, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800, 921600.                                    |
| Protocol  | Communication protocol of the PTZ device. Range from: PELCOP, PELCOP1, PELCOP5, PELCOD, PELCOD1, HY, PHILIPS, SAMSUNG SHARP, SONY, SAMSUNG, PANASMIC, CONTROLLI, etc... |

### 2.4.8.2 Advance configuration



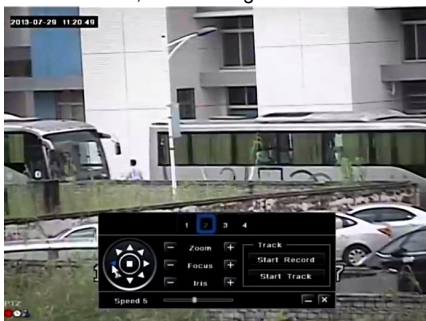
Pic 2-35 Advance

In the Advance interface, after clicking preset “Setting” button, a dialog box will pop-up as below:



Pic 2-36 Preset point setting

In the preset set interface, click Setting button to see a window as below:



Pic 2-37 Preset setting

User can control the P.T.Z up, up left, down, right down, left , left down, right and up right and stop rotating; can adjust the rotation speed of the PTZ, focus and aperture; choose preset arrange NO. Click “Save” button to save the settings, click icon to hide the tool bar, right-key can remerge it; click icon to exit the current interface

In the preset interface, click "OK" button to save the setting; click "Exit" button to exit current interface.

In the Advance interface, click cruise “Setting” button, a dialog box will pop-up as below:



Pic 2-38 Advance - cruise “Setting”

Click Add button to add cruise line (max 32 cruise line can be added); select a cruise line and click Setup button, to see a window as below:



Pic 2-39 Cruise set - preset pointsetting

Click Add icon, to set the speed and time of preset point; select a preset point and click Delete icon to delete that preset point; click Modify icon icon, to modify the setting of a preset point; User can click those icons to adjust the position of preset point: top , up , down and bottom . Click Preview button to preview the cruise line and then click "OK" button to save the setting. Next, click "Exit" button to exit current interface

Select a preset point in the cruise line list box and click Delete button to delete that cruise line; click "Clear all" button to clear all cruise line from the list box; click "OK" button to save the setting; click "Exit" button to exit current interface.

In the Advance interface, click track "Setting" button to pop up a dialog box as below:



Pic 2-40 Track setting

User can control the dome rotates up, up left, down, right down, left, left down, right and up right and stop rotating. adjust the rotate speed and the value of zoom, focus and iris of the dome; click Start Record button to record the move track of PTZ and click this button again can stop record; click Start track button to play recorded track and click this button again can stop play. The user can drag the slider to adjust the rate of P.T.Z movement.

Click icon to hide the tool bar, right-key can remerge it; click icon to exit the current interface.

In the Advance interface, click "Default" button to resort default setting; click "Apply" button to save the setting; click "Exit" button to exit current interface.

## 2.4.9 Advance configuration

Advanced settings include three sub-menu: factory settings, and import / export and exit.

1. Factory settings: all settings back to factory settings.
2. Import / Export: Users can export data files to be backed up on removable storage devices, you can also import the specified data file from a removable storage device to a DVR.
3. Exit: exit current interface.



Pic 2-41 Advance configuration

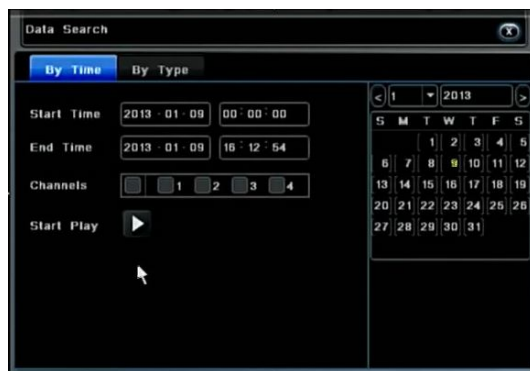
Returned to the main menu, enter the data retrieval interface.

## 2.5 Data retrieval

Search configuration includes two submenus: Time Search, Event Search,

### 2.5.1 Time search

Step1: enter into Search configuration→Time Search; refer to below pic:



Pic 2-42 Time search

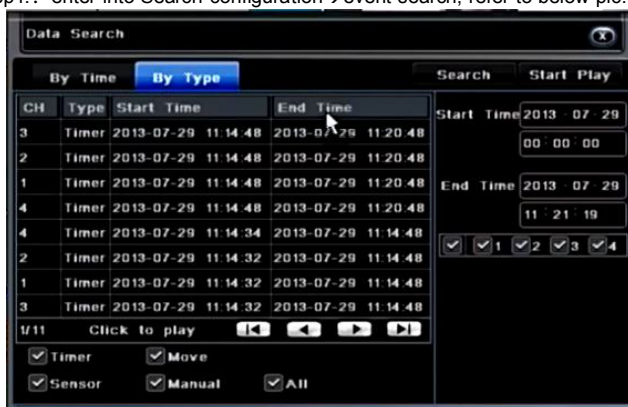
Step 2 : Select the channel, the calendar date , the start time and end time  
 Step 3 : click "Play" button, Playback will start from the set time bucket; click the corresponding button on the screen to start concrete operations.



Pic 2-43 Playback buttons

## 2.5.2 Event search

Step1: enter into Search configuration→event search; refer to below pic.



Pic 2-44 Event search

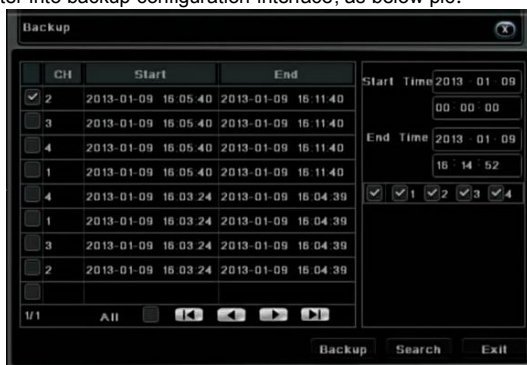
Step2: After clicking Search button, the searched event information will displayed in the event list box, double check a certain record file to playback.

Step3: User can select date, channel. Tick off Motion, Sensor or All accordingly to search.

## 2.6 Backup

This unit supports backup by USB device. User also can make backup by IE browser via internet.

Step1: enter into backup configuration interface, as below pic:



Pic 2-45 Data backup

Step2: set the start & end time, select channels and click Search button to display the searched data in the data backup list box.

Step3: checked a data file or tick off "All" to select all data files, click "Backup" button,

Step4: in the backup information interface, user can check the relevant information of backup files, storage type, save file type, etc. click "Start" button to starting backup.

## 2.7 Check information

Through this option, the user can check system information, system journal, network information

### System Information:

Enter menu → view information → system information. in the interface user can view the equipment and version information and relevant information

### Log information:

Enter menu → View system information → Log information, in the interface users can set the start & end time of log you want to view, select the type of log you want to view and click the search button, searched the log information will be displayed in the log list box.

**Note:** Users can export data files to be backed up on removable storage devices.

### Network information:

Enter menu → view information → Network configuration, in the interface. Users can view the relevant parameters of the network information.

## 2.8 Disk management

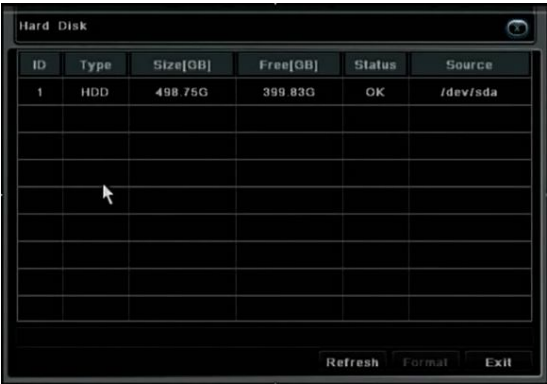
Enter menu → Disk management , In the interface, the user can view disk storage state, also can choose to formatting the hard disk

Please format the hard disk before record ,Specific operation as below: .

Step1: enter into disk management interface, The system will pop up the Disk Management window.

Step2: select a hard disk and click Format button to star format. ; set the property of the disk then click “Apply” button to save the setting.

**Note:** all recorded files in the hard disk will be lost after formatted.

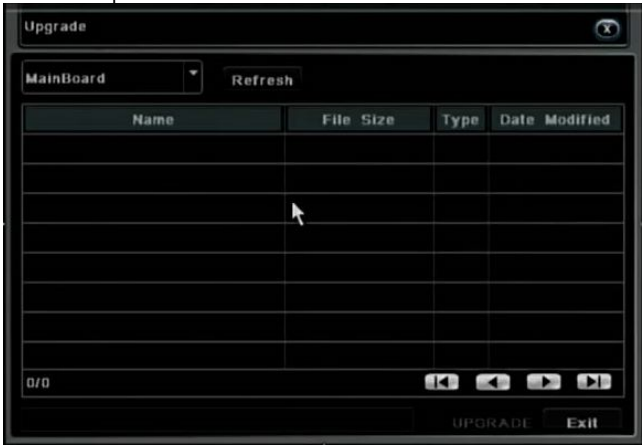


## 2.9 Upgrade

Once have the new version, the user can choose to upgrade the panel and the mianboard, can get upgraded software from the buyers, to upgrade the system.

**Upgrade step:** user needs to copy the upgrade software which get from vendor into the USB storage device and then connect to the USB port. Enter Menu Upgrade , refresh list, the upgrade software name is displayed in the upgrade list box, select that software and click Upgrade button to start upgrading. System will automatically restart on the upgrade process, Please wait for a while when the system is rebooted. Please don't cut off power during upgrading. This system supports the upgrade of the USB device but it must be compatible with the USB device, need to reboot the system after the upgrade completed to take effect.

**Note:** If the upgraded software does not appeared in USB, usually the USB devices are not compatible.



## 2.10 Logoff

Enter Menu → **Logoff**. Click Log off icon, The system will exit the current user login. If user wants to log in again, click mian menu icon to enter into user name and password to re-login.

## 2.11 System shut down

Click“system shut down”icon, shut down system.